

**AVERATEC**  
*My Life, My Style*



**2700 Series User's Guide**  
Space Saving Contemporary Design

## Regulations Information

### FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

- Note** ✓ The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- ✓ Shield interface cables and AC power cord, if any must be used in order to comply with the emission limits.

## **FCC Conditions**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation



For better environmental protection, waste batteries should be collected separately for recycling or special disposal.

## Safety Guideline for Using Lithium Battery

(Danish) ADVARSEL! Lithiumbatteri --- Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af same fabrikat og type. Levé det brugte batteri tilbage til leverandøren.

(Deutsch) VORSICHT: Explosionsgefahr bei unsachgemäßem Austausch der Batterie. Ersatz nur durch denselben oder einen vom Hersteller empfohlenen gleich-wertigen Typ. Entsorgung gebrauchter Batterien nach Angaben des Herstellers.

(English) CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturers instructions.

(Finnish) VAROITUS: Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan valmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

(French) ATTENTION: Il y a danger d'explosion si le remplacement incorrect de la batterie. Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usées conformément aux instructions du fabricant.

(Norwegian) ADVARSEL: Eksplosjonsfare ved feilaktig skifte av batteri. Benytt same batteritype eller en tilsvarende type anbefalt av apparatfabrikanten. Brukte batterier kasseres i henhold til fabrikantens instruksjoner.

(Swedish) VARNING: Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruction.

## Optical Device Drive Notice

**CAUTION** ✓ This appliance contains a laser system and is classified as a “CLASS 1 LASER PRODUCT.” To use this model properly, read the instruction manual carefully and keep this manual for your future reference. In case of any trouble with this model, please contact your nearest “AUTHORIZED service station.” To prevent direct exposure to the laser beam, do not try to open the enclosure.

## Macrovision Notice

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

## Safety Instructions

1. Read the safety instructions carefully and thoroughly.
2. Save this User Guide for possible use later.
3. Keep this equipment away from humidity and high temperature.
4. Lay this equipment on a stable surface before setting it up.
5. The openings on the enclosure are used for air convection and to prevent the equipment from overheating. Do not cover the openings.

6. Make sure that the power voltage is within its safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power inlet.
7. Place the power cord in a way that people are unlikely to step on it. Do not place anything on the power cord.
8. Always unplug the power cord before inserting any add-on card or module.
9. All cautions and warnings on the equipment should be noted.
10. If any of the following situations arises, get the equipment checked by a service personnel:
  - ✓ The power cord or plug is damaged.
  - ✓ Liquid has penetrated into the equipment.
  - ✓ The equipment has been exposed to moisture.
  - ✓ The equipment has not worked well or you can not get it work according to Users Manual.
  - ✓ The equipment was dropped and damaged.
  - ✓ The equipment has obvious signs of breakage.
11. Never pour any liquid into the opening that could damage the equipment or cause an electrical shock.
12. Do not leave the equipment in an unconditioned environment with a storage temperature of 60°C (140°F) or above, which may damage the equipment.
13. To prevent explosion caused by improper battery replacement, use the same or equivalent type of battery recommended by the manufacturer only.

## WEEE Statement

<p>(English) Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life.</p>	<p>(Nederlands) De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Elektrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus..</p>
<p>(Deutsch) Gemäß der Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte dürfen Elektro- und Elektronik-Altgeräte nicht mehr als kommunale Abfälle entsorgt werden, die sich auf 13. August, 2005 wirken. Und der Hersteller von bedeckt Elektronik-Altgeräte gesetzlich zur gebrachten Produkte am Ende seines Baruchbarkeitsdauer zurückzunehmen.</p>	<p>(Srpski) Po Direktivi Evropske unije ("EU") o odbačenoj eelektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja.</p>
<p>(Français) Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie.</p>	<p>(Polski) Zgodnie z Dyrektywą Unii Europejskiej ("UE") dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. "produkty oraz wyposażenie elektryczne i elektroniczne" nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycyfowany z użycia.</p>
<p>(Русский) В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы.</p>	<p>(TÜRKÇE) Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılmayacak ve bu elektronik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır.</p>
<p>(Español) Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como "eléctricos y equipos electrónicos" no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su periodo de vida.</p>	<p>(ČESKY) Podle směrnice Evropské unie ("EU") o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat "elektrické a elektronické výrobky" v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti.</p>
<p>(Italiano) In base alla Direttiva dell'Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita..</p>	<p>(MAGYAR) Az Európai Unió („EU”) 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetők lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelesek válnak az ilyen termékek visszavételére azok hasznos élettartama végén.</p>
<p>(English) As of this writing, the e-waste legislation is undergoing review in the United States Congress. "WEEE" legislation for the United States will be limited to the individual States.</p>	<p>(English) As of this writing, the e-waste legislation is undergoing review in the United States Congress. "WEEE" legislation for the United States will be limited to the individual States.</p>

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- ✓ Microsoft is a registered trademark of Microsoft Corporation.  
Windows98/ME, 2000/XP are registered trademarks of Microsoft Corporation.
- ✓ PCMCIA and CardBus are registered trademarks of the Personal Notebook Memory Card International Association.

## Release History

Version	Revision Note	Date
2.0	Second Release	04, 2009



## Before You Read

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**Note** ✓ Depending on the model, your computer's components may vary and look slightly different than those pictured.

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# Chapter 1

## Introduction

## Unpacking

First, unpack the notebook from the shipping carton and check all items carefully. If any item is damaged or missing, please contact your local dealer immediately. Keep the box and packing materials in case you need to ship the unit in for service in the future.

The package should contain the following items:

- ✓ Notebook Computer
- ✓ Quick Start Guide
- ✓ All-in-one application disk, containing the drivers, utilities, and factory recovery image.
- ✓ High-capacity Li-ion battery pack
- ✓ AC adapter and power cord
- ✓ Phone cable/Phone jack (optional)
- ✓ Notebook carry bag (optional)

These accessories listed above may change without notice.

# Introduction

## Welcome to the Notebook PC

Congratulations on your purchase of the Notebook PC. Your Notebook features the latest advances in portable computing technology. The Notebook's modular design provides maximum expandability without compromising portability.

## Getting to Know Your Computer

### Opening the LCD Panel



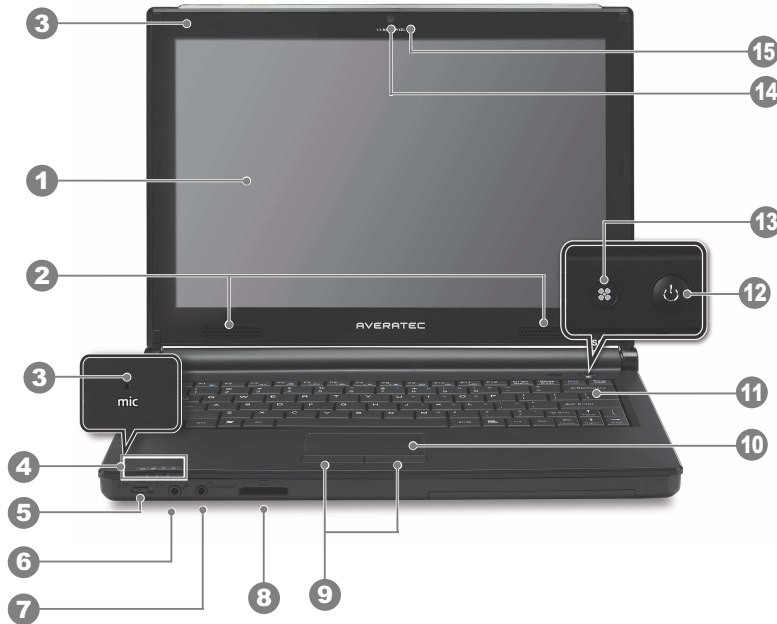
**WARNING** ✓ To avoid damage to the display panel:

1. Try not to slam the display upon closing it.
2. Try not to place any object on top when it is closed or open.
3. Be sure the system is turned off or in suspend mode before you close the display panel.

With the LCD screen open, you will see several features important for operating your Notebook computer.





### Front View

To open, lift the top cover (LCD Panel). The image of the top-open view and descriptions below will help you to get familiarized with the main features of your notebook.



**WARNING** ✓ Do not place any heavy objects on the top of notebook. This may damage the display.

1. LCD display
2. Integrated speakers
3. Built-in microphone
  
4. LED Status Indicator

LED Graphic Symbol	Indication
	Blue light indicates the WLAN module is active.
	Persistent green light indicates the Silent mode is enabled. Blinking green light indicates the Suspend Mode is enabled.
	Blinking orange light indicates the battery is being charged. Blinking red light indicates the battery power is low when the system is turned ON. Persistent green light indicates the Power is ON.
	Green light indicates the hard drive and/or optical drive is being accessed.

5. Wireless LAN on/off switch
6. Microphone jack
7. Headphone/Speaker/SPDIF jack
8. 4-in-1 card reader

The 4-in-1 Card Reader supports SD Card, MMC Card, MS and MS-Pro Card.



9. Touchpad buttons

10. Touchpad

11. Keyboard

12. Power / Suspend button

- Press momentarily to turn on the system.
- Press and hold for at least 4 seconds to turn off the system.
- Press the power / suspend button again to return from the suspend mode.
- Persistent green light indicates the Power is ON

13. Silent mode button

- CPU should be switched to Low Frequency Mode.
- Pressing the key enables the system to lower its power usage; therefore the fan speed is reduced to achieve lowest operating noise.
- Persistent green light indicates the silent mode.

14. Integrated webcam

15. Integrated webcam LED

## Left Views



1. Kensington lock
2. Ventilation grill
3. Power jack (DC-in)
4. VGA port
5. Network connector (LAN)

**Note** ✓ When using a LAN, please use an EMI Shielding Cable to minimize an interference when transmitting.

6. ExpressCard (New Card) slot  
The slot is where Express Card (Type 54) is inserted. ExpressCard Type 54 allows insertion of 54mm and 34mm cards. ExpressCard integrates both the PCI-Express bus technology and USB2.0 standards.
7. IEEE 1394 connector
8. USB connector

## Right View



1. USB connectors
2. CD (CD-ROM/CD-RW/DVD-ROM/COMBO/DVD Dual) drive  
Depending on your model, the optical drive may vary.
3. CD/DVD eject button

## Bottom View



1. Expansion compartment
2. Ventilation grill
3. Hard disk drive
4. Battery lock/unlock button
5. Battery pack

Chapter 2

# Getting Started

## Connecting to a Power Source

### Connecting the AC Adapter

A universal AC adapter is provided to supply your computer with power and also charge the computer's battery pack. The adapter's AC input voltage can range anywhere from 100 to 240 volts, covering the standard voltages available in almost every country.

To connect the computer to an external power source:



**WARNING** ✓ Do not use inferior extension cords as this may result in damage to your Notebook. The Notebook comes with its own AC adapter. Do not use a different adapter to power the computer and other electrical devices.

Whenever possible, keep the AC adapter plugged into the Notebook and an electrical outlet to recharge the battery.

**WARNING** ✓ Never turn off or reset your Notebook while the hard disk is in use and the CD-ROM status icon is lit; doing so can result in loss or destruction of your data. Always wait at least 5 seconds after turning off your Notebook before turning it back on; turning the power on and off in rapid succession can damage the Notebook's electrical circuitry.

## Turning On Your Notebook Computer

Turn on your Notebook by pressing the power button. Hold the button down for a second or two and release. The Power-On Self Test (POST) runs automatically.

After the POST is completed, the computer reads the operating system from the hard disk drive into computer memory (this is commonly referred to as “booting” a computer). If your OS (Operating System such as Windows Vista... etc) is installed, it should start automatically.

To turn the Notebook off, save your work and close all open applications, click on Start, then Shut Down and select Shut down the computer and click "Yes" or press the power button for 4-6 seconds.

## Operating on Battery Power

Your computer comes with a rechargeable battery pack that lets you operate the computer without an external power source. When the battery pack is the charged, you can operate the computer under the following conditions:

- The battery pack is installed and no AC adapter is plugged in

**WARNING** ✓ Only use batteries that are approved by an authorized dealer. All batteries are not the same and therefore should not be treated as such. Using the wrong battery could cause serious damage to your computer and yourself through toxic emissions.

**CAUTION** ✓ Danger of explosion if battery is incorrectly replaced. Replace only with same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions or local laws.

## Installing and Removing the Battery Pack

To Remove the Battery Pack



To Install the Battery Pack



## Charging the Battery Pack

The installed battery pack charges automatically any time the computer is connected to the AC adapter and an external power source. It is a good idea to occasionally discharge the battery pack fully to preserve its operating performance.



Chapter 3

# Using the Notebook Computer

## Adjusting the LCD Screen Display

The LCD screen display can be adjusted by the following key combinations.

KEYS	FUNCTIONS
Fn + F7	Increases the brightness level.
Fn + F8	Decreases the brightness level.
Fn + F4	Changes Display Mode: LCD-only, CRT-only and LCD&CRT.

### LCD Care

LCD screens are delicate devices that need careful handling.

Please pay attention to the following precautions:

- When you are not using the computer, keep the LCD screen closed to protect it from dust.
- If you need to clean your LCD screen, use a soft tissue to gently wipe the LCD surface.
- Do not put your fingers or sharp objects directly on the surface and never spray cleaner directly onto the display.
- Do not press on, or store any objects on the cover when it is closed. Doing so may cause the LCD to break.

## External CRT Display










You can hook up an external monitor through the 15-pin CRT connector. Three configurations are available:

- LCD only
- CRT only
- Simultaneous display of the LCD screen and CRT monitor

You can switch between these display configurations by pressing the key combination [Fn] + [F4].

# The Notebook's Hot Key Controls

## Function Keys (Quick Keys)

Graphic Symbol	Action	System Control
	Fn + F1	Enters Suspend Mode.
	Fn + F3	Mute/Unmute Audio
	Fn + F4	Changes Display Mode: LCD-only, CRTonly and LCD&CRT.
	Fn + F5	Increases the speaker volume.
	Fn + F6	Decreases the speaker volume.
	Fn + F7	Increases the brightness level.
	Fn + F8	Decreases the brightness level.
	Fn + F9	Eable/Disable the Touchpad
	Fn + F10	Enable/Disable the Web camera

## The TouchPad

The touchpad is a rectangular electronic panel located just below your keyboard. You can use the static-sensitive panel of the touchpad and slit it to move the cursor. You can use the buttons below the touchpad as left and right mouse buttons.

### TouchPad Precautions

The TouchPad is a pressure sensitive device. Please take note of the following precautions.

- Make sure the TouchPad does not come into contact with dirt, liquids or grease.
- Do not touch the TouchPad if your fingers are dirty.
- Do not rest heavy objects on the TouchPad or the TouchPad buttons.

You can use the TouchPad with Microsoft Windows as well as non-Windows applications.

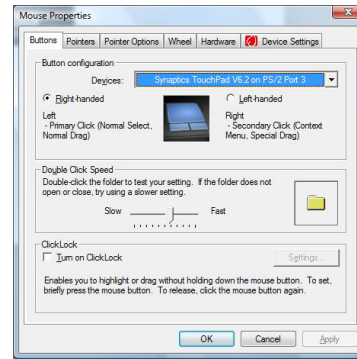
### How to improve the sensitivity of the touch pad

If you want to improve the sensitivity or adjust the speed of your touch pad, please refer to the following sections.

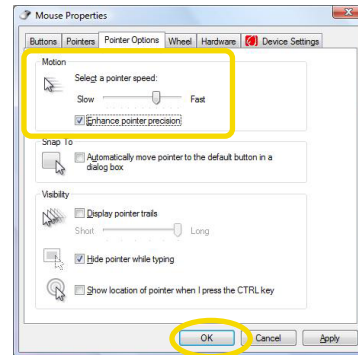
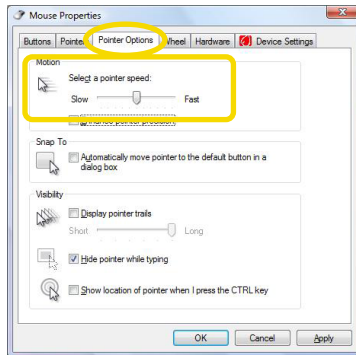
#### [Adjusting the mouse pointer speed](#)

If you want to adjust the mouse pointer speed, please follow these steps.

- 1 Double click the **Synaptics Pointing Device** icon in the task bar.

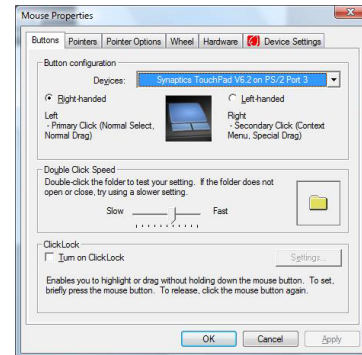


- 2 After selecting the **Pointer Options** tab, set the point speed option in the Motion menu. Then select the Enhance pointer precision option and press the **OK** button.

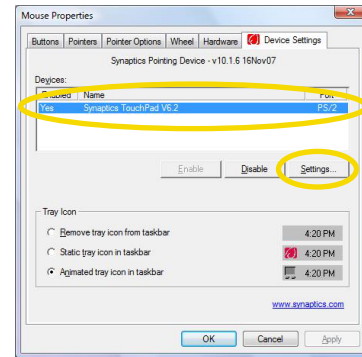


## Adjusting the touch pad sensitivity

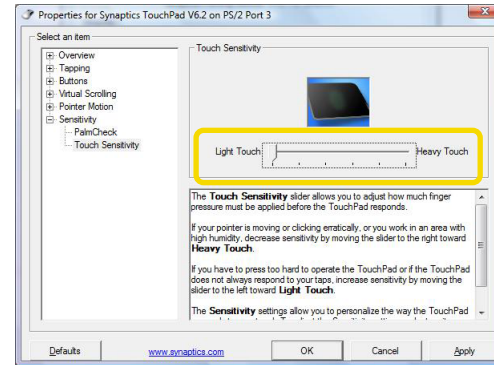
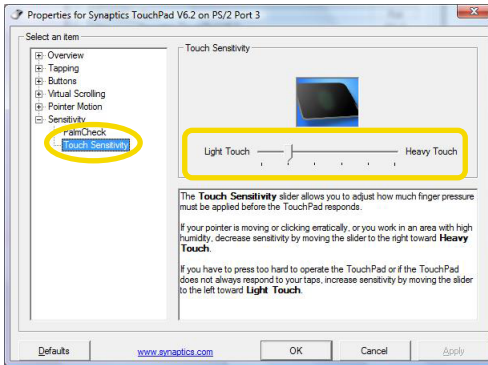
- 1 Double click the **Synaptics Pointing Device** icon in the task bar.



- 2 Select the **Device Settings** tab, and see if the touch pad program is selected in the **Devices** menu. Then press the **Settings** button.



- 3 In the left menu, select the **Touch Sensitivity** item and move the touch sensitivity slider toward 'Light Touch'.



### What is a touch sensitivity function?

This function allows you to adjust how much force is required to use the touch pad. In general, to increase sensitivity shift the slide bar toward 'Light Touch'. To decrease sensitivity, shift it toward 'Heavy Touch'.

- Note** ✓ If you want to use other functions for your touch pad, click on each tab and set the option properly.
- ✓ The recommended setting for the touch pad attributes depends on the user's preference. Please set it to your own preference.



## The DVD Dual/SuperMulti

### Features of the DVD Dual/SuperMulti

The features of the DVD Dual/SuperMulti are listed below.

- The Audio Play feature allows you to play music CDs
- Front panel load/unload button
- Supports CD-DA, CD-ROM mode 1 and mode 2, Multi-Session Photo CD<sup>™</sup>, CD-I/Video CD (pcs.)
- Low power consumption
- 12.7mm height

### Precautions for Handling CD Discs

- Always hold the disc by the edges, avoid touching the surface.
- Use a clean, dry, cloth to remove dust, smudges, or fingerprints. Wipe from the center outward.
- Do not write or place objects on the surface of the disc.
- Store discs in a cool dry place not to damage the disc.
- Do not use benzene, thinners, or cleaners with detergent. Only use CD-ROM/DVD-ROM/Combo cleaning kits.
- Do not bend or drop the discs.

## Loading a Disc

To play a CD disc, follow the instructions listed below.

1. Push the DVD Dual/SuperMulti eject button on the CD drive door. Gently pull the tray all the way out.
2. Carefully lift the CD disc by the edges and make sure the shiny surface is face down (the side with no writing on it). Carefully insert the CD disc onto the tray. Push the CD disc down gently so that it snaps onto the center ring.
3. Push the tray back into the drive.

To remove a CD disc, do the following:

1. Check the LED display and make sure that the computer is not accessing the DVD Dual/SuperMulti.
2. Push the eject button and pull the tray all the way out.
3. Carefully pick up the CD disc by the edges and - while pressing down on the center ring - remove the CD disc from the tray.

**Note** ✓ Do not insert any foreign objects into the disc tray. If you experience difficulty when ejecting the CD disc tray, stretch a paper clip (or use a pin or a thin metal rod) and insert it into the emergency eject hole located on the right side of the front panel. The CD disk tray should eject immediately. This procedure can also be used to remove a CD from the drive when the Notebook is powered off.

## Power Saving Modes

This section contains information on the Notebook's power system, including the AC Adapter, the battery system, recharging the battery, and tips for conserving battery power.

The power system is comprised of two parts, the AC Adapter and the battery system. The AC Adapter converts AC power from a wall outlet to the DC power required by the computer.

### The Battery Power System

Before using the computer on battery power for the first time, check the battery status icon on the Windows Toolbar to make sure the battery is fully charged.

See Battery Status later in this section for a description and explanation of the Windows Battery icon.

Charging the battery takes about 4–6 hours to charge when the system is in off state.

If possible, always charge the battery completely.

- Note** ✓ If you use typically go through 20 or more charge cycles (full charge to complete discharge), it is highly recommended you perform the Battery Calibration every 3 months to maintain the battery life.
- ✓ Please refer to the topic on “Battery Calibration” describing how to calibrate your system battery .
  - ✓ If you discover the battery life is getting shorter, please perform the “Battery Calibration” process immediately.

## Removing the Battery Pack

To remove the battery pack from its compartment, please refer to **Inserting and Removing the Battery Pack**.

### Preparing the Battery Pack for Use (Battery Calibration)

Before using the battery pack for the first time, the Smart Battery IC within the battery pack should be calibrated in order to get accurate reporting of remaining battery life status.

To calibrate the battery pack follows the instructions below:

1. Insert the battery into the battery compartment and turn on the Notebook. If the battery is completely drained go to the next step. Otherwise, let the battery run down until the low battery warning beeps are heard. The system will automatically enter into Suspend mode.
2. Turn the Notebook off. Connect the AC adapter and let the battery fully recharge. When the battery charge indicator turns off, the battery is fully charged.
3. Turn On the notebook, let the battery run down until the low-battery state is achieved and you hear the warning beeps. The system will automatically enter the Suspend mode. You can now connect the AC adapter.
4. The battery pack is now calibrated properly.

In general, using the battery until the low battery-warning indicator appears and then fully recharging the battery each time (full discharge/charge cycle) will ensure accurate reporting of the battery gauge status.

## Automatic Battery Pack Charging Function

To charge the battery, while the battery pack is in the notebook, plug the AC adapter into the notebook and an electrical outlet. The charging time is approximately 4-6 hours when the notebook is turned off and approximately 6-10 hours when the notebook is turned on.

When the battery is fully charged, the battery charge indicator turns off.

**Note** ✓ Under heavy use or when exposed to high temperatures, the battery may take longer to charge than normal. You need to continue to charge it with the AC adapter plugged in until the charging LED turns off.

## Battery Status

Windows Vista has an applet in the Control Panel that will display an icon in the Windows taskbar indicating when the Notebook is running on battery power or is attached to the AC adapter.

This applet also displays a meter that indicates how much charge is remaining in the battery.

## Battery Low Warning

When the pack initially reaches the “Battery Low” state approximately 7 ~ 10 minutes of the usable battery life is left. You will hear an audible beep signal every 15 seconds alerting you to the “Battery Low” status. When the battery power reaches the “Battery Low Low” status the beeping sound will accelerate. Your battery now has 1 ~ 2 minutes of battery charge remaining. You must save your data or connect AC power immediately; otherwise, you may lose your data.

Sound	Meaning
Continuous beeping every 5 seconds	Battery Low: Indicates that there is 7 to 10 minutes charge remaining.
Beeping accelerates	Battery Low Low: Indicates that there is 1 to 2 minutes of battery charge remaining. Save your work and turn off the Notebook, or connect the AC adapter.

When there is only one minute of battery charge remaining, the Notebook will suspend to the HDD and power off. You should connect AC power and resume to save your work.

## Small Battery for the Real Time Clock

There is a small built-in battery pack that supplies power to the system in order to maintain certain system information while the power is off.

If the Notebook is left without a power source for long period of time, this battery will be exhausted and system information will be lost.

**WARNING** ✓ Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Never remove the battery pack while the power is on as this may result in data loss when the system loses power.

## Adjusting the Brightness

To adjust the brightness on the LCD screen, press and hold down the **[Fn]** key in the lower left hand corner of the keyboard and press the **[F8]** key to reduce the brightness or **[F7]** to increase the brightness.



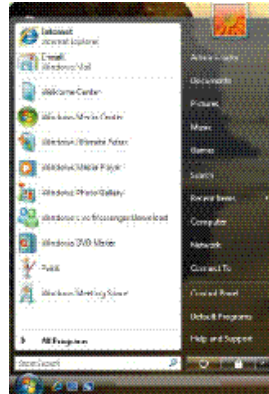


## Recycle Bin

Used for storing deleted files in case you want to recover and save it in your system. The files will only be deleted from the Recycle Bin permanently only if you empty it by right clicking your mouse and select the “Empty Recycle Bin”.

## Start Button

Allows easy access to all Windows programs.



The Start menu allows you to adapt and show the programs used most frequently. If you wish to keep an item, right click the item and click **Pin to Start menu**.

**Log Off** will enable the current user to log off and allows a new user to log on.

**Turn Off Computer** allows you to shut down, restart, and Stand by modes for power saving purposes.

## Taskbar

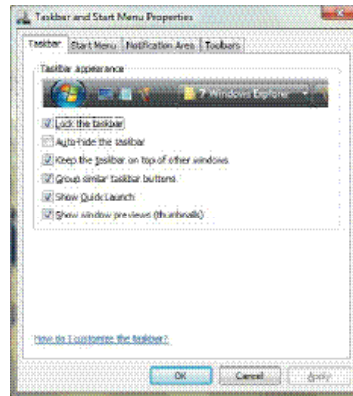
When you open a program, its icon is displayed at the taskbar for you to conveniently move between programs by clicking the relevant button.

To add or remove toolbars from the taskbar: right click an empty spot on the taskbar, select **Toolbars ► choose the toolbar you want to add**.

## Notification

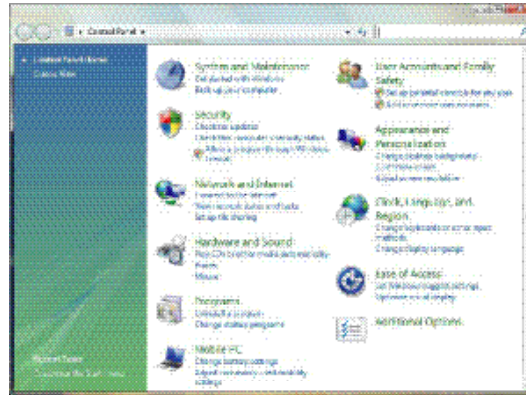
The icons that appear here are for quick access to some programs and computer functions that you frequently used. To prevent Windows Vista from hiding icons:

From an empty spot on the **Taskbar**, right click your mouse and select the **Properties**, remove the checked mark on the **Auto-hide the taskbar**.



## Control Panel

It is in this area that you can change how Windows looks and works. Click Start ► Control Panel dialog box. There are two interfaces - **Classic View**.



# Chapter 4

## Desktop Operation

Your notebook is capable of providing you with efficient and productive mobile computing, it also has the speed and capacity to service as a desktop system.

This chapter discusses those functions of your notebook that are typical of desktop systems.

## Audio

### **The Multimedia Sound System**

The Notebook's built-in audio capabilities allow you to take advantage of a wide range of education and entertainment multimedia software. The Notebook is equipped with two internal stereo speakers, a microphone, and input audio ports for external audio units.

An external microphone can be connected to the microphone jack.

External speakers or headphones can be connected to the Notebook's audio-out jack.

External audio devices can be connected to the Line in jack. All audio features are software controlled. The Notebook's multimedia sound system includes the following features:

- Supports Windows Sound System compatibility
- Full Duplex operation
- Dynamic filtering reduces noise and distortion rate
- 16-bit digitized audio playback
- Built-in stereo speakers
- Digitized audio recording through the Notebook's built-in microphone or any external source

## Audio Volume Control

The Notebook is equipped with hot-key volume controls: Pressing the **[Fn]+[F6]** hot-key combination decreases the audio output volume, press the **[Fn]+[F5]** hot-key combination increases the audio output volume.

## Audio Software

Your notebook comes equipped with an integrated sound system capable of providing you with quality audio sound through the builtin speakers or through external speakers connected via the system ports.

## Sound Recording

Your system allows you to record sounds and store them as files using the microphone via the microphone jack on the rear of the notebook computer. Check the Windows Help and Support Center in Windows for information on using the various elements in sound recording.

**Note** ✓ For a high-quality sound, click on the "Volume Control" at the lower right end of your screen. From the Volume Control windows, click on the "Advanced" tab, click and select the "Microphone Boost" item.

## Playing Sound Files

Your notebook can play audio files stored in MIDI, WAVE or MP3 file format. Check the Help and Support Center in Windows for information on the functions of the Media Player.

## External Speakers and Microphone

The sound system is capable in providing high-quality sound to external speakers and receiving and processing sounds from an external microphone or external sound source.

## Connecting Peripheral Devices

To expand your computing capabilities, you can add a variety of external devices to your computer.

Chapter

5

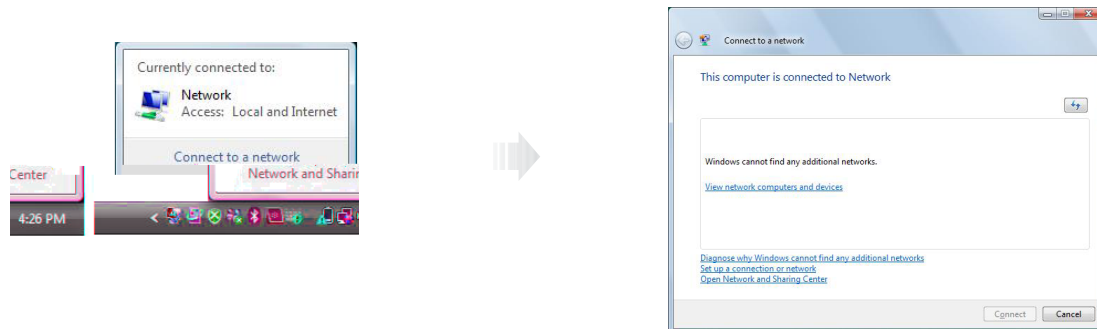
# Internet Connection

There are numerous ways to connect to the Internet. This may vary from the user's working environment as well as system specifications.

- Using a wired LAN
- Using a wireless LAN

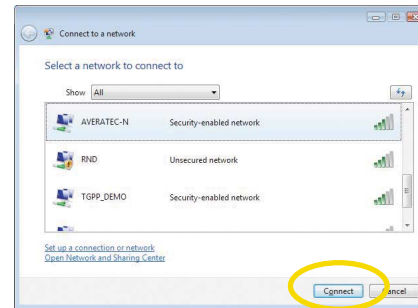
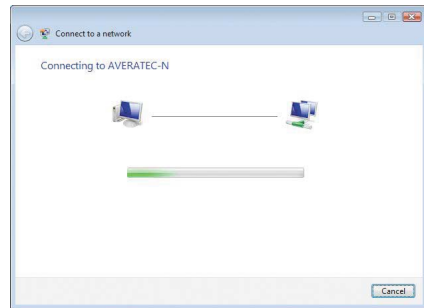
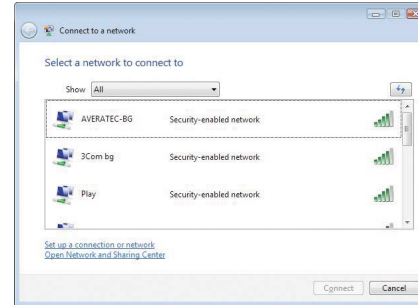
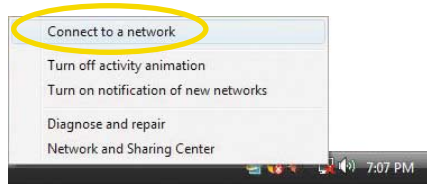
## Using a Wired LAN for Connection to the Internet

For you connect to the Internet, a wired LAN environment normally uses the company's LAN or a broadband modem.





# Using Wireless LAN Network for Connection to the Internet



Chapter

6

# Running BIOS Setup

The Setup Utility is a hardware configuration program built into your computer's BIOS (Basic Input/Output System). It runs and maintains a variety of hardware functions. It is menu-driven software, which allows you to easily configure and change the settings.

The BIOS contains manufacture's default settings for the computer's standard operations. However, there are occasions when you may be required to modify the default settings in the BIOS.

The BIOS allows you to set up passwords to limit access to users. This is an important feature because a great deal of vital information is carried within the computer nowadays. Unauthorized access can be prevented. Later in this chapter, you will learn how to use this security feature.

## Entering the BIOS Setup Screen

First turn on the power. When the BIOS performs the POST (Power-On Self Test), press F2 key quickly to activate the Phoenix BIOS Setup Utility.

**Note** ✓ You may need to press F2 key fairly quickly. Once the system begins to load Windows, you may have to retry by cycle-power on again

## Leaving the BIOS Setup Screen

When you have finished modifying the BIOS settings, exit the BIOS. It takes a few seconds to record changes in the CMOS.

## BIOS Action Keys

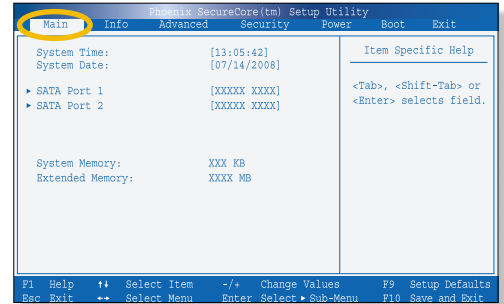
Function Key	Command	Description
ESC	Exit	Leaves a sub-menu to return to the previous menu OR exits the BIOS setup while saving changes.
Enter	Go to Sub Screen	Shows the Sub Menu
F1	General Help	Shows the Help Screen
F10	Save and Exit	Saves changes and reboots the computer.
<Tab>	Select a field	Selects the next field.
↑	Select an item	Selects the next upper item.
↓	Select an item	Selects the next lower item.
-	Lower value	Selects the next value within a field.
+	Higher value	Selects the next value within a field.

# Modifying the BIOS Settings

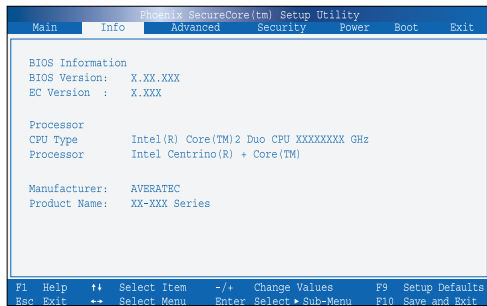
The Phoenix BIOS setup main menu is subdivided into sub-menus. Each menu item is described in this section.

## Main Setup

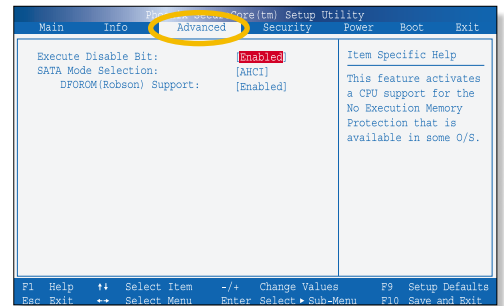
Under this menu, you may change time/date and view basic processor and system memory information.



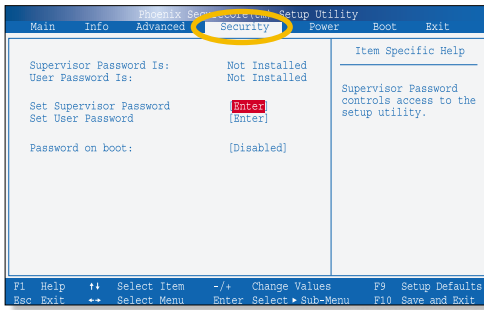
## Info Setup



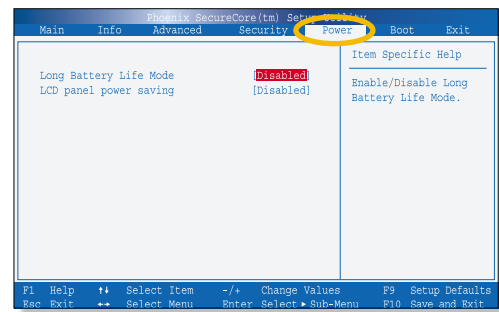
## Advanced Setup



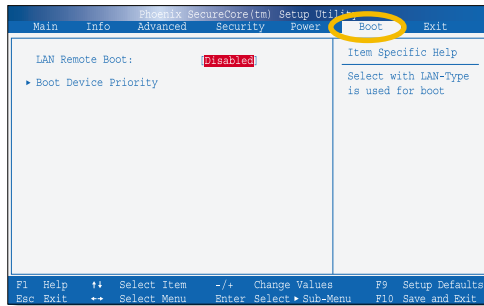
## Security Setup



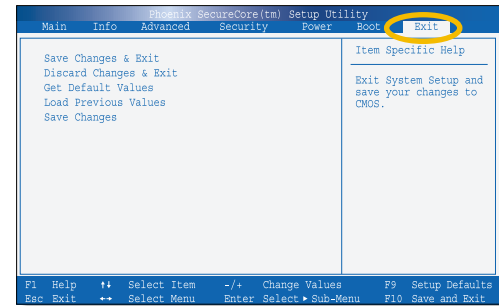
## Power Setup



## Boot Setup



## Exit Setup



Chapter

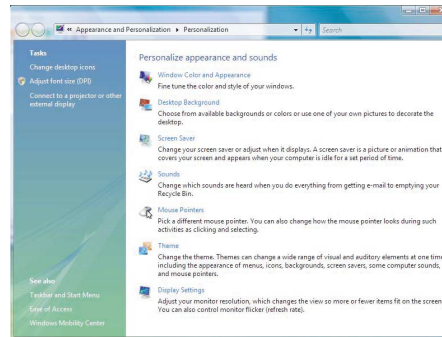
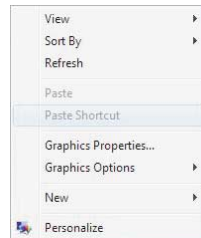
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# VGA Utilities

After you have restarted Windows, click on the **Intel® Graphics Media Accelerator Driver for Mobile** icon on the lower right corner of the screen.

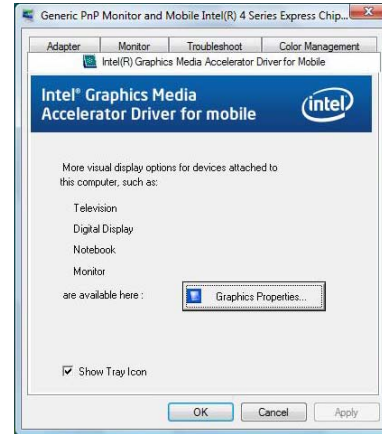
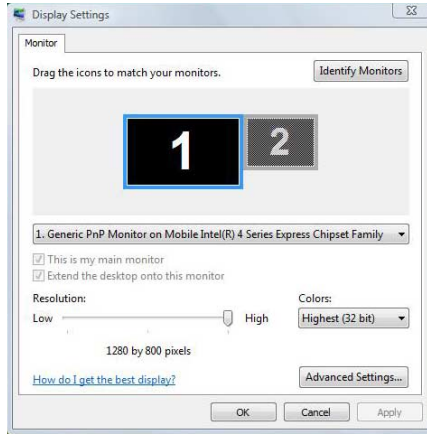


Click on the **Graphics Properties** to enter the **Intel® Graphics Media Accelerator Driver for Mobile** display window. You can also click the touchpad or mouse right button and select the **Personalize** item.





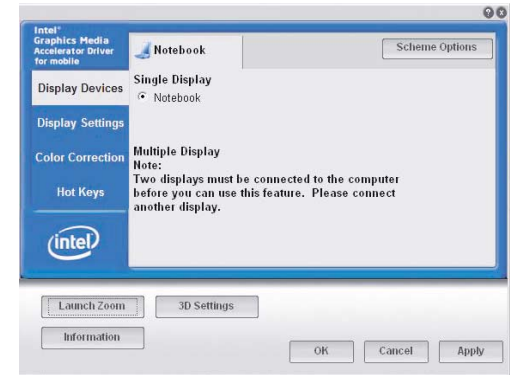
Select the **Display Settings** option to enter its window display. Click on the **Advanced Settings** tab to enter **Generic PnP Monitor and Mobile Intel® 4 Series Express Chipset Family** window display.



Select the **Intel® Graphics Media Accelerator Driver for Mobile** and click on the **Graphics Properties** tab.

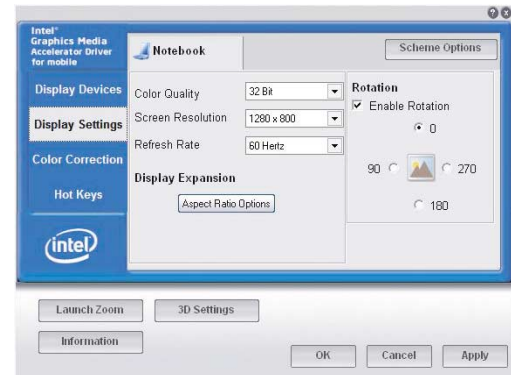
## Display Devices

This feature allows you to connect external display devices.



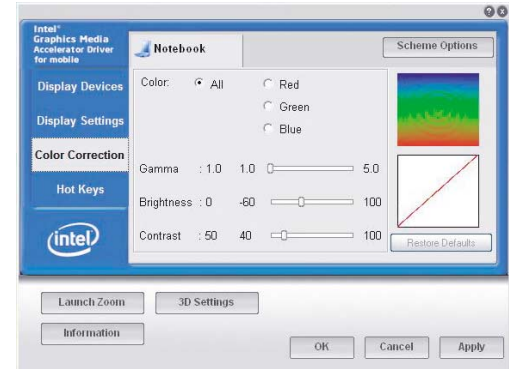
## Display Settings

This feature allows you to adjust the color scheme, resolution, refresh rate for your display.



## Color Correction

This feature allows you to adjust the color rate of your display.



## Hot Keys

This feature allows you to set the corresponding hot keys in executing the program you frequently use.



## Launch Zoom

This feature allows you to enlarge some parts that you would like to see for a clearer view.



Chapter 8

# Troubleshooting

Your computer has been fully tested and complies with the system specifications before shipping. However, incorrect operations and/or mishandling may cause problems.

This chapter provides a reference for identifying and correcting common hardware and software problems that you may encounter.

When you encounter a problem, you should first try to go through the recommendations in this chapter. Instead of returning the computer and waiting for repair, you may easily solve the problems by considering the following scenarios and possible solutions. If the error continues, contact your reseller for service information. Before taking further actions, consider the following suggestions:

- Check to see if the problem persists when all the external devices are removed.
- Check to see that the green light indicator on the AC adapter is lit.
- Check to see the power cord is properly plugged to the wall outlet and to the computer.
- Check to see the power indicator of the computer is on.
- Check to see if your keyboard is operational by pressing and holding any key.
- Check for any incorrect or loose cable connections. Make sure the latches on the connectors latch securely on to the receptor end.
- Be sure you have not performed an incorrect setting on the hardware devices in the BIOS Setup utility. A faulty setting may cause the system to misbehave. If you are not sure of the changes you made, try to restore all the settings to factory defaults.
- Be sure all the device drivers are installed properly. For example, without the audio driver properly installed, the speakers and microphone will not work.

- If external devices such as USB cameras, scanners, printers do not function correctly when connected to the system, it is usually a problem with the device driver or the device itself. Consult the device's manufacturer first before contacting TriGem USA support center.
- Some software programs, which have not gone through rigorous coding and testing, may cause problems during your routine use. Consult the software vendor for problem solving.
- Legacy peripheral are not plug-and-play capable. You need to restart the system with these devices powered up and connected first.
- Be sure to go to BIOS SETUP and load DEFAULT SETTING after BIOS re-flash.
- Be sure the Quick Key Lockout Switch on the bottom of the computer is not engaged; otherwise the quick keys will not work.

## Audio Problems

### **No speaker output -**

- Software volume control is turned down in Microsoft Sound System or is muted. Double-click the speaker icon on the lower right corner of the taskbar to see if the speaker has been muted or turned down all the way.
- Most audio problems are software-related. If your computer worked before, chances are software may have been set incorrectly.
- Go to [Start > Settings > Control Panel] and double-click the Sounds and Audio Devices icon. In the Audio page, make sure that the audio codec mentioned in the spec is the default playback device.

### **Sound cannot be recorded -**

- You will need to plug-in an external microphone to the microphone connector to record sound.
- Double-click the speaker icon on the lower right corner of the taskbar to see if the microphone has been muted.
  - Click Options and select Properties.
  - Select Recording and click the OK button.
  - After Click OK button, the recording volume control panel will appear.
- Go to [Start > Settings > Control Panel] and double-click the Multimedia icon (or Sounds and Audio Devices icon). In the Volume or Audio page, make sure that the audio codec mentioned in the spec is the default recording device.

## **Hard Disk Problems**

### **The hard disk drive does not work or is not recognizable**

- If you had just performed a hard disk upgrade, make sure the hard drive connector is not loose and the hard disk drive is also correctly seated. Remove it and reinsert it firmly, and restart your PC.
- The new HDD may need to be partitioned and reformatted. O/S and drivers will need to be re-installed as well.
- Check the hard disk indicator LED. When you access a file, the LED lamp should light up momentarily.
- The new HDD may be defective or is not compatible.
- If your computer has been subjected to static electricity or physical shock, you may have damaged the disk drive.



### **The hard drive is making abnormal whining noises**

- should back up your files as soon as possible.
- Make sure the source of noise is indeed from the hard drive and not the fan or other devices.

### **The hard disk drive has reached its capacity**

- Run Disk Cleanup utility in Windows. [Start > All Programs > Accessories > System Tools > Disk Cleanup] The system will prompt you for what to do.
- Archive files or programs that you had no longer used by moving them to an alternative storage medium (floppy disk, optical record-able disk, etc.) or uninstall programs that no longer use.
- Many browsers store files in the hard drive as a cache to speed up the performance. Check the program's Online Help for instructions on decreasing the cache size or on removing temporary Internet files.
- Empty the Recycle Bin to create more disk space. When you delete files, Windows saves them to the Recycle Bin.

### **The hard disk takes longer to read a file**

- If you have been using the drive for a period, the files may be fragmented. Go to [Start > Programs > Accessories > System Tools > Disk Defragmenter] to perform a disk defragmentation. This operation may take a while.
- Interrupt requests or problems with other hardware devices may have occupied the CPU and therefore slows down the system performance.

### **The files are corrupted**

- Run the Error-checking utility in Windows to check the HDD. Double-click My Computer. Right-click C: and select Properties. Click Check Now in Error-checking in Tools.

## Optical Drive Problems

### **The optical drive does not work**

- Try rebooting the system.
- The disk is damaged or files are not readable.
- After you have inserted a CD-ROM disk, it may take a moment before you can access its content.

### **The drive does not read any disks**

- The CD may not be properly seated in the tray. Make sure the disk is firmly seated onto the spindle.
- The disk is damaged or not readable.

### **The disk cannot be ejected**

- Normally, it takes a few seconds to eject the disk.
- If the disk cannot be ejected, it may be mechanically jammed. Straighten out a paper clip and insert it to a tiny hole next to the eject button. This should reject the disk tray. If not, return the unit for repair. Do not forcefully pull on the disk tray.

### **The Combo or DVD RW drive (optional device) cannot record**

- You need to purchase and install a burner utility program to record files to a blank media.

## Display Problems

### **The display panel is blank when the system is turned on**

- Make sure the computer is not in the Standby or Hibernate suspend modes. The display is turned off to conserve energy in these modes.

### **The screen is difficult to read -**

- The display resolution should at least be set to at least 1280x800 for optimal viewing.
  - Go to [Start > Settings > Control Panel] and double-click the Display icon.
  - Under the Settings page, set screen resolution to at least 1280x800 and choose at least high(65536) colors.

### **The screen flickers -**

- It is normal if the display flickers a few times during shutting down or powering up.

## Keyboard and Mouse Problems

### **The built-in touch pad performs erratically -**

- Make sure there is no excess perspiration or humidity on your hand when using the touch pad. Keep the surface of the touch pad clean and dry.
- Do not rest your palm or wrist on the surface of the touch pad while typing or using the touch pad.

### **The built-in keyboard accepts no input -**

- Please try to make sure the system doesn't hang up and is still working.

### **The characters on the screen repeat while I type.**

- You may be holding the keys down too long while you're typing.
- Keep the keyboard clean. Dust and dirt under the keys could cause them to stick.
- Configure the keyboard to wait longer before the auto repeat feature starts. To adjust this feature, Go to [Start > Settings > Control Panel], and double-click the Keyboard icon.  
A dialogue box shows up with the adjustable settings for the keyboard.

## **CMOS Battery Problem**

### **A message “CMOS Checksum Failure” displays during the booting process or the time (clock) resets when booting**

- Try to reboot the system.
- If the message “CMOS Checksum Failure” appears during the booting procedure even after rebooting, it may indicate failure of the CMOS battery. If so, you need to replace the battery.  
This battery normally lasts two to five years. The battery is of type CR2032 (3V). Send the battery to the dealer for replacement.

## Memory Problems

### **The POST does not show an increased memory capacity when you have already installed additional memory**

- Certain brands of memory module may not be compatible with your system. You should ask your vendor for a list of compatible DIMM.
- The memory module may not be installed properly. Go back to Chapter 4 to review the details of this operation.
- The memory module may be defective.

### **The O/S issues an insufficient memory error message during operation**

- This is often a software or Windows-related problem. A program is draining the memory resources.
- Close the application programs you're not using and restart the system.
- You need to install additional memory module. For instructions, go to Chapter 4 Upgrading Your Computer.

## PC Card / PCMCIA Problems

**Note** ✓ Some system may not have the PC Card Slot option.

### **PC Cards do not function-**

- Make sure you have properly installed the driver for the card.
- Consult the card's manual or contact the vendor for troubleshooting.

### **The PC card cannot be recognized -**

- Make sure the card is fully inserted; the outer end of the card should be even with the edge of the computer.
- Remove and insert the PC card again.
- Make sure there is no IRQ conflict with the card. See Windows on-line help for solving IRQ conflicts.
- Reboot the computer and see if the problem persists.
- The card may be defective. Try the card on another system, if possible.

### **Windows crashes or freezes when you remove the PC card-**

- Make sure you have <Stop> the PC card before removing it. Double-click the Safely Remove Hardware icon at the lower right corner of the task bar and select the card you wish to stop.  
When you click <Close>, in few seconds Windows will prompt you to remove the card.

## **Performance Problems**

### **The computer becomes hot -**

- In a 60°F environment, the certain areas of the computer's back case are expected to reach 50 degrees.
- Make sure the air vents are not blocked.
- If the fan does not seem to be working at high temperature (50 degrees Celsius and up), contact the service center.
- Certain programs that are processor-intensive may increase the computer temperature to a degree where the computer automatically slows down its CPU clock to protect itself from thermal damage.

### **The program appears stopped or runs very slowly -**

- Press CTRL+ALT+DEL to see if an application is still responding.
- Restart the computer.
- This may be normal for Windows when it is processing other CPU-intensive programs in the background or when the system is accessing slow-speed devices such the floppy disk drive.
- You may be running too many applications. Try to close some applications or increase system memory for higher performance.
- The processor may have been overheated due to the system's inability to regulate its internal heat. Make sure the computer's ventilation grills are not blocked.

## **USB2.0 Problems**

### **The USB device does not work -**

- Check the settings in the Windows Control Panel.
- Make sure you have installed the necessary device drivers.
- Contact the device vendor for additional support.

Chapter 9

# Specification



## CPU

- Intel CPU : Core™ 2 Duo Support, up to 1066MHz, up to 3MB an 6MB L2 Cache  
Package : PGA Socket P pin out

## Memory

- DDRII 667/800
- DDRII RAM socket \* 2
- DDR2 up to 4GB total

## Core Logic

### **Intel Cantiga GM45 + ICH9M**

Support DDRII 667/800 SO-DIMM module per channel

## VGA

### Intel Cantiga

- Supports DX9 & DX10
- Dynamic Video Memory Technology (DVMT) 4.0 support
- WMV9(VC-1) and H.264(AVC) support
- Spread spectrum clocking (SSC) support.
- Analog CRT DAC interface support.

## Audio Codec

### Realtek ALC888

- Support 7.1 multi-channels
- Azalia standard support
- Windows Vista Premium support

## IEEE 1394a

- Support IEEE 1394a with Open HCI Compliance
- PCI V2.3 MAC/BIU supports

## Card reader (4 in 1)

- Support SD/MMC/MS/MS-Pro card
- PCI interface

## LAN Controller

### **Realtek 8102E**

- Supports 10 and 100 Mb/sec. Full/Half Duplex operation
- PCI-E interface

## Wireless LAN (Optional)

### **Intel Wireless WiFi Link 5100 Series**

- PCIe Mini card
- 2 antenna supported
- IEEE 802.11 a/b/g/Draft-N compliant

## Keyboard

- 84/85 Keys K/B

## Pointing Device

- PS2 Touch Pad with 2 buttons w/o scroll up/down

## LCD

- LCD is 12.1" WXGA, resolution 1280X800
- Glare & non Glare panel/Wide view type

## HDD

- Support SATA II HDD, 1 x 2.5"( 9.5mm)
- 5400rpm support.

## Battery Pack

- 4 cells Pack, 14.4/14.8V/2200mAH
- 8 cells Pack, 14.4/14.8V/4400mAH

## AC-Adapter

- Automatics Voltage adjustment between 100 and 240VAC 50/60Hz
- 65 Watts, 2pin

## BIOS

- Support Phoenix ACPI 3.0 BIOS

## Physical Outline

- 296 x 227 x 26.3 - 31mm (w/o rubber foot)
- 1.95Kg w/ 4 cells battery

## Camera module support (Optional)

- 1.3M module
- USB interface Fixed LENS.

